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# 14



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## RAW SEQUENCE LISTING

DATE: 02/21/2003 P.6

PATENT APPLICATION: US/10/034,692B

TIME: 09:48:43

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\02212003\J034692B.raw

3 <110> APPLICANT: GILL, Peter  
 4 HUSSAIN, Javaid  
 5 LONG, Adam  
 7 <120> TITLE OF INVENTION: Improvements in and relating to analysis of DNA  
 9 <130> FILE REFERENCE: 7500.331USC1  
 11 <140> CURRENT APPLICATION NUMBER: 10/034,692B  
 C--> 12 <141> CURRENT FILING DATE: 2003-02-13  
 14 <150> PRIOR APPLICATION NUMBER: PCT/GB00/02795  
 15 <151> PRIOR FILING DATE: 2000-07-24  
 17 <150> PRIOR APPLICATION NUMBER: GB9917307.2  
 18 <151> PRIOR FILING DATE: 1999-07-23  
 20 <150> PRIOR APPLICATION NUMBER: GB0009187.6  
 21 <151> PRIOR FILING DATE: 2000-04-14  
 23 <160> NUMBER OF SEQ ID NOS: 42  
 25 <170> SOFTWARE: PatentIn Ver. 2.1  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 25  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Artificial Sequence  
 32 <220> FEATURE:  
 33 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial  
 34 universal primer sequence designed to act as a  
 35 molecular beacon and referred to at page 13 of the  
 36 application.  
 38 <400> SEQUENCE: 1  
 39 acgcgctctc ttcttctttt gcgcg 25  
 42 <210> SEQ ID NO: 2  
 43 <211> LENGTH: 20  
 44 <212> TYPE: DNA  
 45 <213> ORGANISM: Artificial Sequence  
 47 <220> FEATURE:  
 48 <221> NAME/KEY: unsure  
 49 <222> LOCATION: 20  
 50 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial  
 51 universal reporter primer forward sequence  
 52 designed to optimally prime at 60 degrees C, page  
 53 29. n = a or g or c or t  
 55 <400> SEQUENCE: 2  
 W--> 56 cgacgtggtg gatgtgctan 20  
 59 <210> SEQ ID NO: 3  
 60 <211> LENGTH: 20  
 61 <212> TYPE: DNA  
 62 <213> ORGANISM: Artificial Sequence

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64 <220> FEATURE:
65 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial
66     universal primer reverse sequence designed to
67     optimally prime at approximately 60 degrees C,
68     page 29.
70 <400> SEQUENCE: 3
71 tgacctggct gactcgactg                                20
74 <210> SEQ ID NO: 4
75 <211> LENGTH: 20
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial
81     universal primer reverse sequence designed to
82     optimally prime at 60 degrees C, page 30.
84 <400> SEQUENCE: 4
85 tgccgtggct gacctgagac                                20
88 <210> SEQ ID NO: 5
89 <211> LENGTH: 20
90 <212> TYPE: DNA
91 <213> ORGANISM: Homo sapiens
93 <400> SEQUENCE: 5
94 gtattttcgt ctggggggta                                20
97 <210> SEQ ID NO: 6
98 <211> LENGTH: 21
99 <212> TYPE: DNA
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 6
103 gtctgtcttt gattcctgcc c                              21
106 <210> SEQ ID NO: 7
107 <211> LENGTH: 20
108 <212> TYPE: DNA
109 <213> ORGANISM: Homo sapiens
111 <400> SEQUENCE: 7
112 tttgattcct gcctcatccc                                20
115 <210> SEQ ID NO: 8
116 <211> LENGTH: 20
117 <212> TYPE: DNA
118 <213> ORGANISM: Homo sapiens
120 <400> SEQUENCE: 8
121 atattacagg cgaacatacc                                20
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 27
126 <212> TYPE: DNA
127 <213> ORGANISM: Homo sapiens
129 <400> SEQUENCE: 9
130 gcttgtagga cataataata acaatta                        27
133 <210> SEQ ID NO: 10
134 <211> LENGTH: 22

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TIME: 09:48:43

Input Set : A:\seqlist.txt

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135 <212> TYPE: DNA
136 <213> ORGANISM: Homo sapiens
138 <400> SEQUENCE: 10
139 cagagatgtg tttaagtgt gt                22
142 <210> SEQ ID NO: 11
143 <211> LENGTH: 19
144 <212> TYPE: DNA
145 <213> ORGANISM: Homo sapiens
147 <220> FEATURE:
148 <223> OTHER INFORMATION: k = g or t
150 <400> SEQUENCE: 11
151 accagctttg ccagttcck                19
154 <210> SEQ ID NO: 12
155 <211> LENGTH: 16
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
159 <220> FEATURE:
160 <223> OTHER INFORMATION: m = c or a
162 <400> SEQUENCE: 12
163 ttccgtgggt gtggcm                16
166 <210> SEQ ID NO: 13
167 <211> LENGTH: 21
168 <212> TYPE: DNA
169 <213> ORGANISM: Homo sapiens
171 <400> SEQUENCE: 13
172 ggcagagcga ctaaaagcaa a            21
175 <210> SEQ ID NO: 14
176 <211> LENGTH: 37
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Description of Artificial Sequence: A human Gc
182     forward primer with an artificial universal primer
183     tag to detect a SNP polymorphism at Gcls/lf, page
184     47.
186 <400> SEQUENCE: 14
187 cgacgtgggtg gatgtgctag gttccgtggg tgtggcc        37
190 <210> SEQ ID NO: 15
191 <211> LENGTH: 41
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence: A Human Gc
197     reverse primer with an artificial universal primer
198     tag to detect a SNP polymorphism at Gcls/lf, page
199     47.
201 <400> SEQUENCE: 15
202 tgacgtggct gacctgagac ggcagagcga ctaaaagcaa a    41
205 <210> SEQ ID NO: 16

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## RAW SEQUENCE LISTING

DATE: 02/21/2003

PATENT APPLICATION: US/10/034,692B

TIME: 09:48:43

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\02212003\J034692B.raw

```

206 <211> LENGTH: 45
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial
212     universal molecular beacon primer sequence
213     designed to detect universal primer 9G
214     polymorphism, page 47.
216 <400> SEQUENCE: 16
217 acgcgctctc ttcttctttt gcgcgcgacg tgggtggatgt gctag           45
220 <210> SEQ ID NO: 17
221 <211> LENGTH: 20
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial
227     reverse primer sequence designed to detect
228     universal reverse 11 primer sequence, page 47.
230 <400> SEQUENCE: 17
231 tgacgtggct gacctgagac           20
234 <210> SEQ ID NO: 18
235 <211> LENGTH: 39
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Description of Artificial Sequence: A human Gc
241     forward primer attached to an artificial universal
242     primer tag to detect a SNP polymorphism at
243     Gc1s/1f, page 48.
245 <400> SEQUENCE: 18
246 cgacgtgggtg gatgtgctag accagctttg ccagttccg           39
249 <210> SEQ ID NO: 19
250 <211> LENGTH: 39
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Description of Artificial Sequence: A human Gc
256     forward primer attached to an artificial universal
257     primer tag to detect a SNP polymorphism at
258     Gc1s/1f, page 48.
260 <400> SEQUENCE: 19
261 cgacgtgggtg gatgtgcttc accagctttg ccagttcct           39
264 <210> SEQ ID NO: 20
265 <211> LENGTH: 37
266 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence: A human Gc
271     forward primer attached to an artificial universal

```

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DATE: 02/21/2003

PATENT APPLICATION: US/10/034,692B

TIME: 09:48:43

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\02212003\J034692B.raw

```

272     primer tag to detect a SNP polymorphism at
273     Gcls/lf, page 48.
275 <400> SEQUENCE: 20
276 cgacgtggtg gatgtgctag gttccgtggg tgtggcc          37
279 <210> SEQ ID NO: 21
280 <211> LENGTH: 37
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Description of Artificial Sequence: A human Gc
286     forward primer attached to an artificial universal
287     primer tag to detect a SNP polymorphism at
288     Gcls/lf, page 48.
290 <400> SEQUENCE: 21
291 cgacgtggtg gatgtgcttc gttccgtggg tgtggca          37
294 <210> SEQ ID NO: 22
295 <211> LENGTH: 41
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Description of Artificial Sequence: A human Gc
301     reverse primer attached to an artificial universal
302     primer tag to detect SNP polymorphisms at Gcls/lf,
303     page 48.
305 <400> SEQUENCE: 22
306 tgacgtggct gacctgagac ggcagagcga ctaaaagcaa a          41
309 <210> SEQ ID NO: 23
310 <211> LENGTH: 45
311 <212> TYPE: DNA
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial
316     molecular beacon forward primer attached to a
317     universal primer tag to detect universal primer 9G
318     polymorphism.
320 <400> SEQUENCE: 23
321 acgcgctctc ttcttctttt gcgcgcgacg tggatggatgt gctag          45
324 <210> SEQ ID NO: 24
325 <211> LENGTH: 45
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Description of Artificial Sequence: An artificial
331     molecular beacon forward primer attached to a
332     universal primer tag to detect universal primer 9C
333     polymorphism.
335 <400> SEQUENCE: 24
336 acgcgctctc ttcttctttt gcgcgcgacg tggatggatgt gcttc          45
339 <210> SEQ ID NO: 25

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/034,692B

DATE: 02/21/2003  
TIME: 09:48:44

Input Set : A:\seqlist.txt  
Output Set: N:\CRF4\02212003\J034692B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 20  
Seq#:28; N Pos. 30

**VERIFICATION SUMMARY**

DATE: 02/21/2003

PATENT APPLICATION: US/10/034,692B

TIME: 09:48:44

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\02212003\J034692B.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:56 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0